

## HIV/AIDS in Urban-Nonurban Areas

- Many ways to characterize urban and nonurban areas and populations
- CDC uses Metropolitan Statistical Areas (MSA) as defined by the Office of Management and Budget
- MSAs can be divided into areas with:
  - >500,000 population
  - 50,000-500,000 population
  - Nonmetropolitan

## HIV/AIDS in Urban-Nonurban Areas

There are many ways to classify areas and populations into urban and nonurban categories. Although each classification system is slightly different, most places designated as urban by one system are also considered urban under the others. Some systems distinguish between larger and smaller metropolitan areas, some consider proximity to metropolitan areas, and others consider economic and social integration with a core area of high population. The Centers for Disease Control and Prevention uses the Office and Management and Budget system that designates metropolitan statistical areas (MSA). MSAs can be divided into areas of population greater than 500,000, 50,000 to 500,000, and nonmetropolitan.

## Adult/Adolescent AIDS Cases by Size of Place of Residence\*, Reported in 1999 and Cumulative, United States<sup>#</sup>

<u>Size of place of residence</u>	<u>1999 Number</u>	<u>1999 Rate/100,000</u>	<u>1981-1999 Number</u>
Metropolitan area >500,000	36,525	26.6	593,859
Metropolitan area 50,000-500,000	4,594	12.0	63,382
Nonmetropolitan area	3,269	7.4	40,251

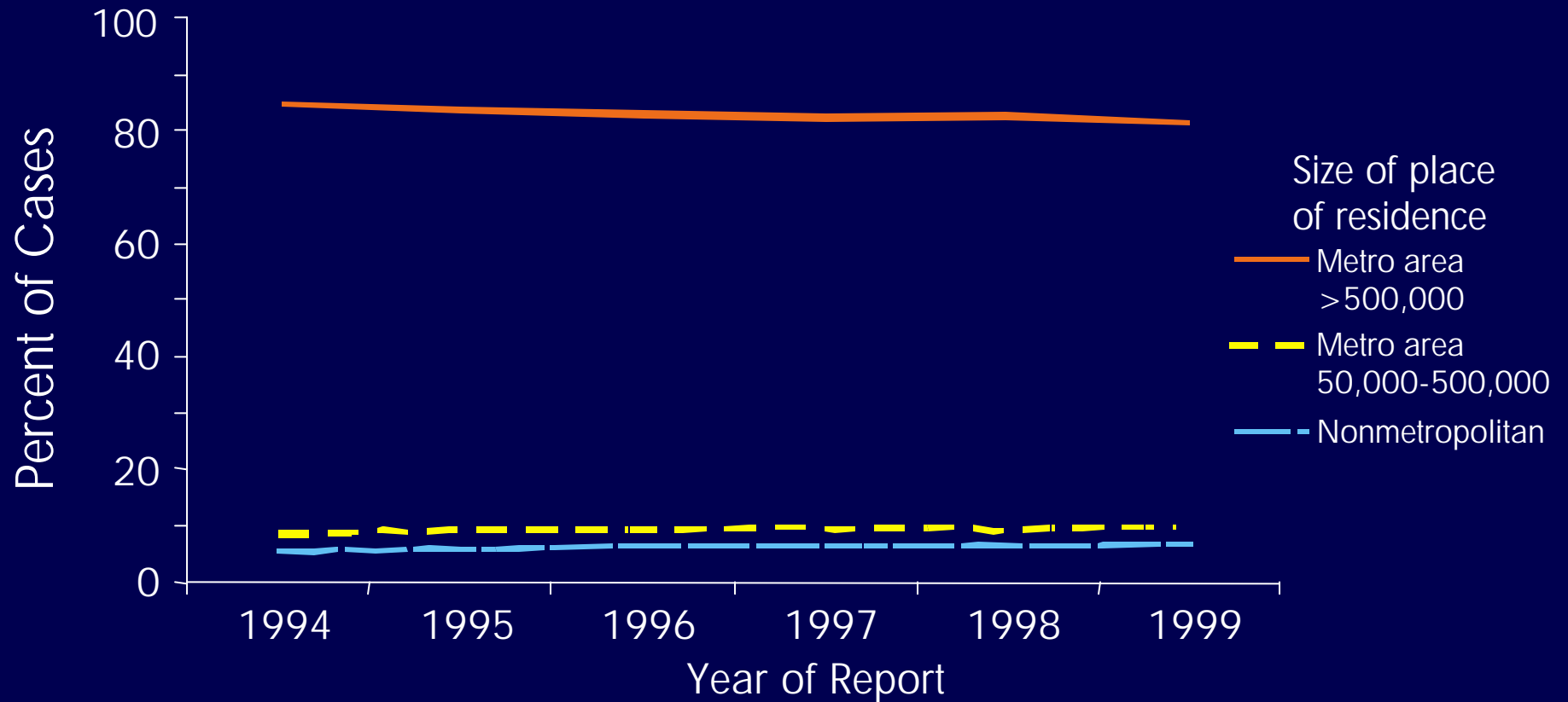
\*Based on reported residence at AIDS diagnosis

<sup>#</sup> Cases from Puerto Rico, US Virgin Islands and territories are not included

## **Adult/Adolescent AIDS Cases by Size of Place of Residence, Reported in 1999 and Cumulative, United States**

The distribution of AIDS cases, recently reported and cumulatively since 1981, shows the majority of persons reported with AIDS (82% and 85%, respectively) resided in large urban areas at the time of diagnosis. Approximately 10% of persons were reported from metropolitan areas with population 50,000 to 500,000; 7% of persons reported with AIDS in 1999 were from nonmetropolitan areas. In comparison, 62% of the general adult population in the United States lives in large metropolitan areas, 17% in medium sized metropolitan areas, and 20% of the population resides in nonmetropolitan areas.

## Percent Distribution of Adult/Adolescent AIDS Cases by Size of Place of Residence,\* 1994-1999, United States<sup>#</sup>



\*Based on reported residence at AIDS diagnosis

<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included

## **Percent Distribution of Adult/Adolescent AIDS Cases by Size of Place of Residence, 1994-1999, United States**

Although the number of AIDS cases has varied over time, the percent distribution of AIDS cases by size of place of residence has not changed much. In 1994, 85% of the nearly 76,000 AIDS cases were from large metropolitan areas and 6% were from nonmetropolitan areas. With steady decreases in the number of persons reported with AIDS since 1994, in 1999 82% of reported cases were from large metropolitan areas and 7% were from nonmetropolitan areas.

# Regions of the United States



## Regions of the United States

This map shows which states are included in the four regions of the United States. Puerto Rico, the U.S. Virgin Islands and U.S. territories are not included in this regional classification system although they report AIDS cases to CDC.



# Adult/Adolescent AIDS Cases and Rate per 100,000, by Size of Place of Residence\* and Region, Reported in 1999, United States<sup>#</sup>

<u>Region</u>	Metropolitan area >500,000		Metropolitan area 50,000 - 500,000		Nonmetropolitan area	
	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
Northeast	12,671	38	807	17	411	9
North Central	3,408	12	510	5	376	3
South	13,375	32	2,792	17	2,187	11
West	7,071	21	485	7	295	5

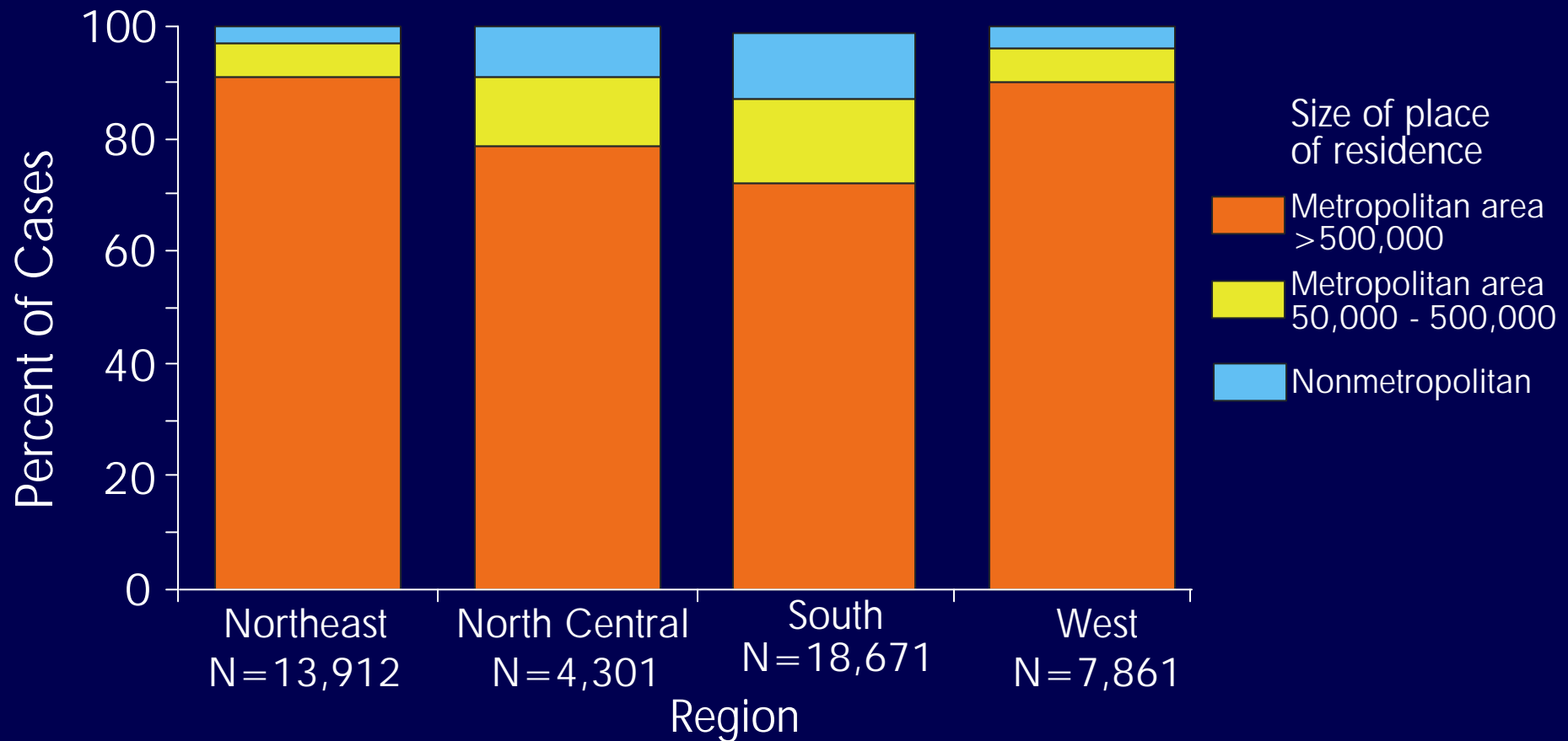
\*Based on reported residence at AIDS diagnosis

<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included

## **Adult/Adolescent AIDS Cases and Rate per 100,000 Population, by Size of Place of Residence and Region, Reported in 1999, United States**

In each region of the United States, the majority of persons reported with AIDS are from large metropolitan areas, followed by smaller metropolitan areas, and the fewest from nonmetropolitan areas. The South has the largest proportion of cases reported from nonmetropolitan areas, and the highest rate in those places. Although the large metropolitan areas have the most AIDS cases, the smaller metropolitan and nonmetropolitan areas, especially in the South, also share a significant burden of the AIDS epidemic. These places may face different challenges than the larger areas to provide adequate care and services to the affected populations.

# Percent Distribution of Adult/Adolescent AIDS Cases by Size of Place of Residence\* and Region, Reported in 1999, United States<sup>#</sup>



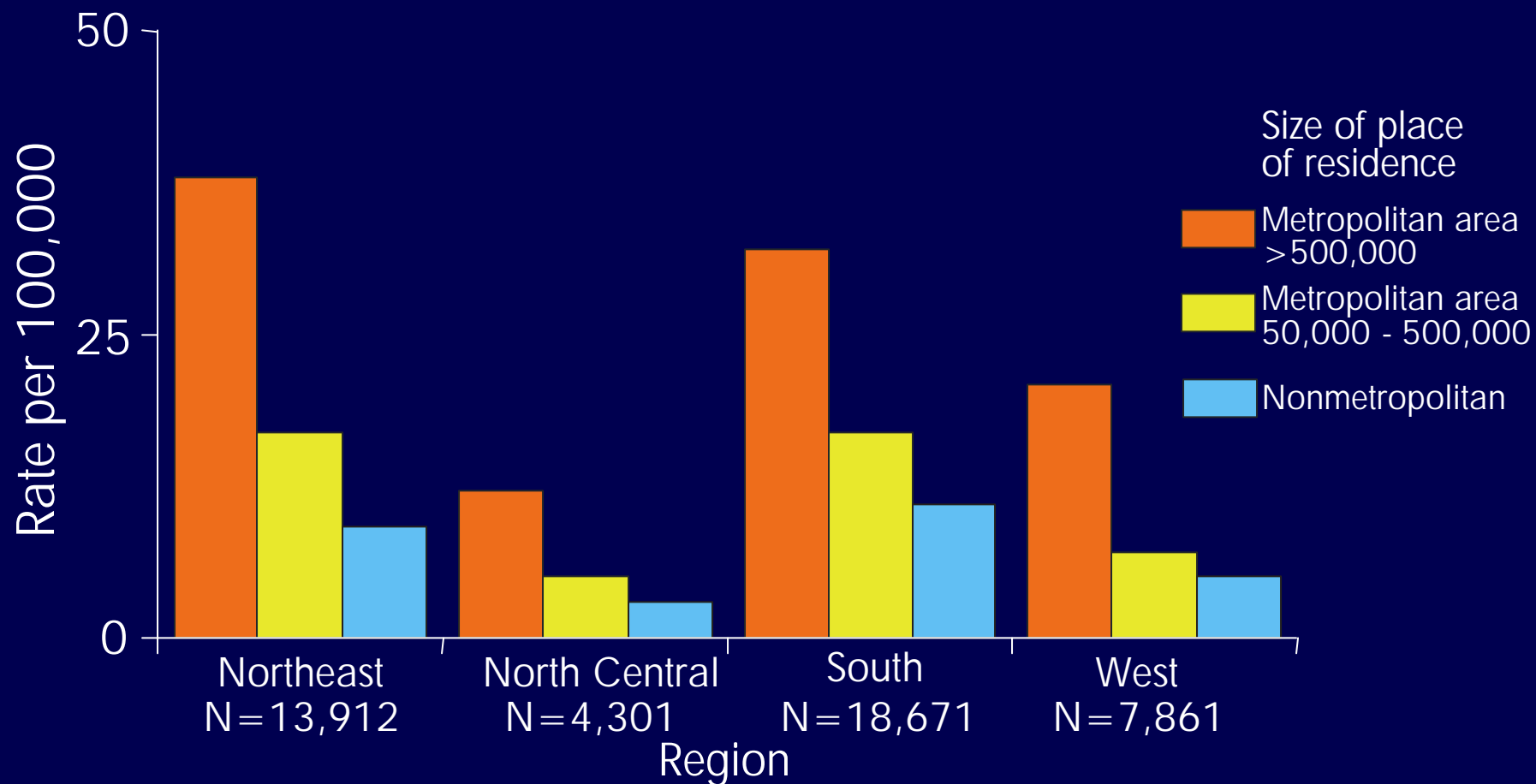
\*Based on reported residence at AIDS diagnosis

<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included;  
totals include cases with unknown size of place of residence

## **Percent Distribution of Adult/Adolescent AIDS Cases, by Size of Place of Residence and Region, Reported in 1999, United States**

The distribution of AIDS cases by size of place of residence for each region of the United States is presented. The total number of cases in each region include cases without information about the size of place of residence at diagnosis. The majority of cases are reported from large metropolitan areas; however, the South has the largest percentage of cases reported from smaller metropolitan and nonmetropolitan areas.

# Adult/Adolescent AIDS Rates per 100,000 Population, by Size of Place of Residence\* and Region, Reported in 1999, United States<sup>#</sup>



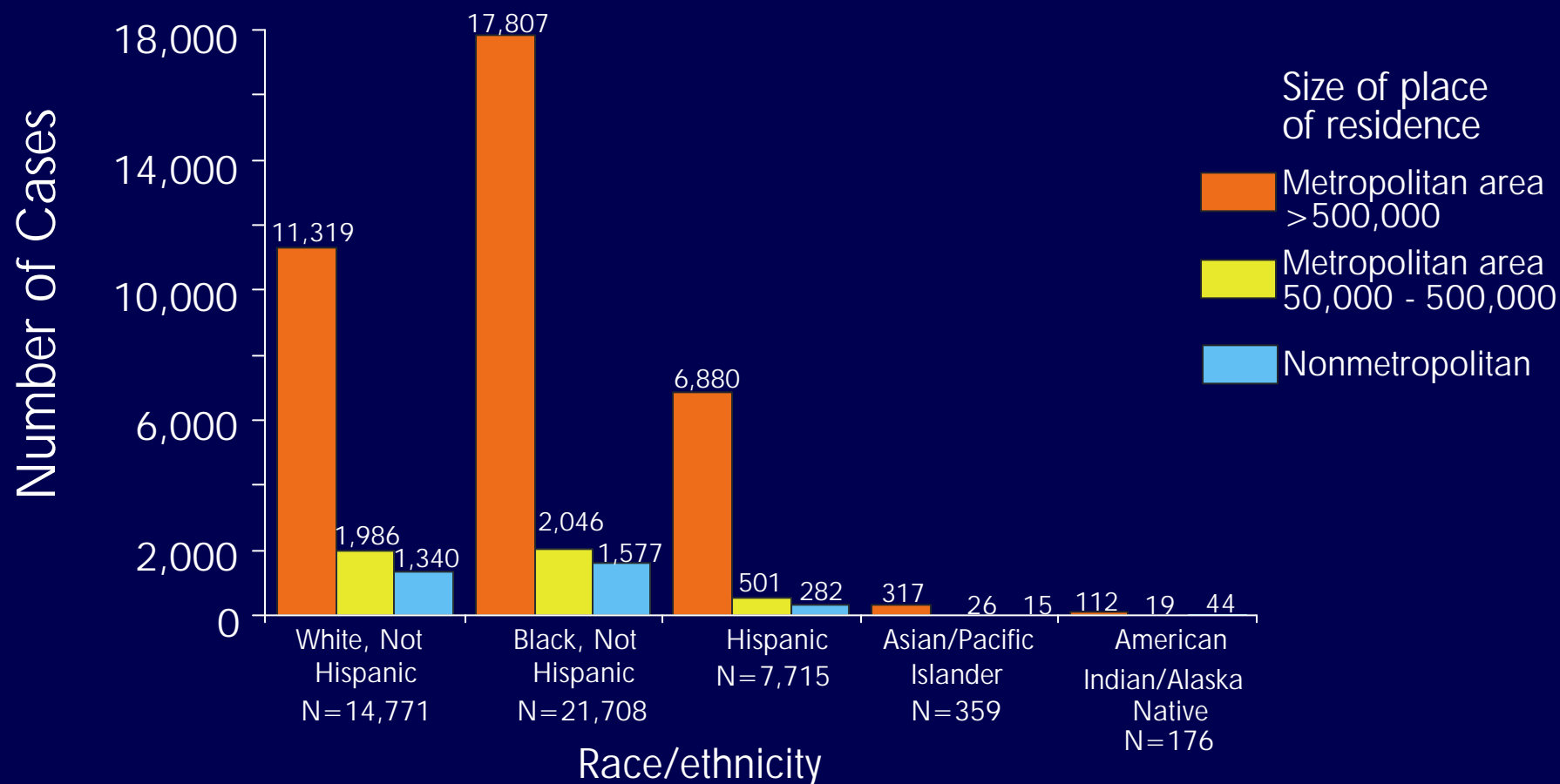
\*Based on reported residence at AIDS diagnosis

<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included;  
totals include cases with unknown size of place of residence

## **Adult/Adolescent AIDS Rate per 100,000 Population, by Size of Place of Residence and Region, Reported in 1999, United States**

The distribution of AIDS rates per 100,000 population is shown for each region and size of place of residence. The highest rate is found in the large metropolitan areas of each region. The rates in the smaller metropolitan areas of the Northeast and South, however, exceed the rates in all areas of the North Central region and are similar to that in the large metropolitan areas of the West.

# Adult/Adolescent AIDS Cases by Size of Place of Residence\* and Race/Ethnicity, Reported in 1999, United States<sup>#</sup>



\*Based on reported residence at AIDS diagnosis

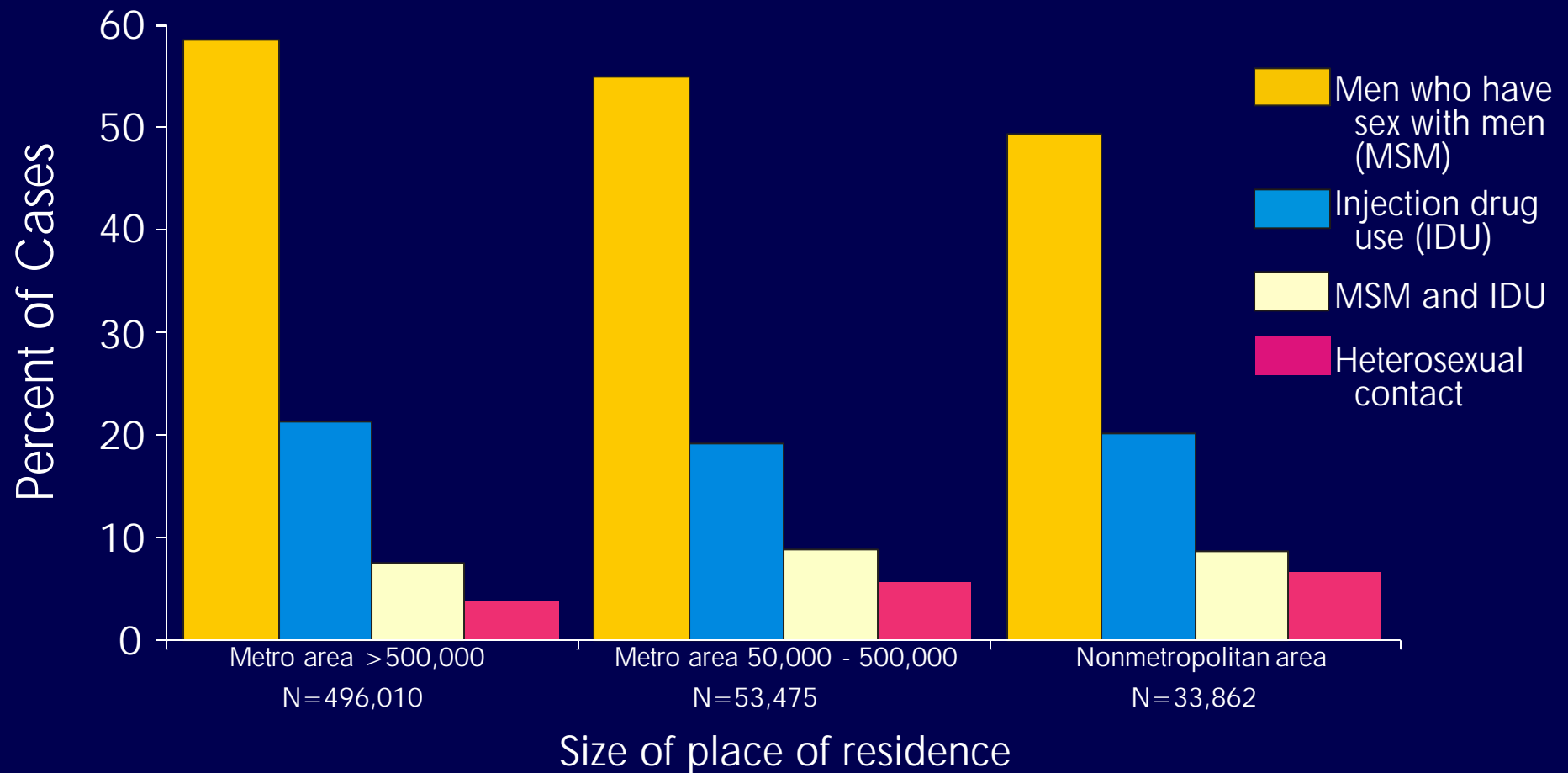
<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included; totals include cases with unknown size of place of residence

## **Adult/Adolescent AIDS Cases by Size of Place of Residence and Race/Ethnicity, Reported in 1999, United States**

The majority of AIDS cases reported in 1999 were among black, non-Hispanic persons and the majority of AIDS cases within each racial/ethnic group was reported from large metropolitan areas. Eighty-two percent of cases reported among blacks, 77% of cases among whites, 89% of Hispanic and 88% of Asian/Pacific Islander cases were reported from large metropolitan areas. A smaller percentage, 64%, of cases among American Indian/Alaska Natives were from the large metropolitan areas. These distributions in large part reflect the distribution of the general population in the United States.



# Percent Distribution of AIDS Cases in Adult/Adolescent Men, by Size of Place of Residence\* and Risk Exposure, Reported through 1999, United States<sup>#</sup>



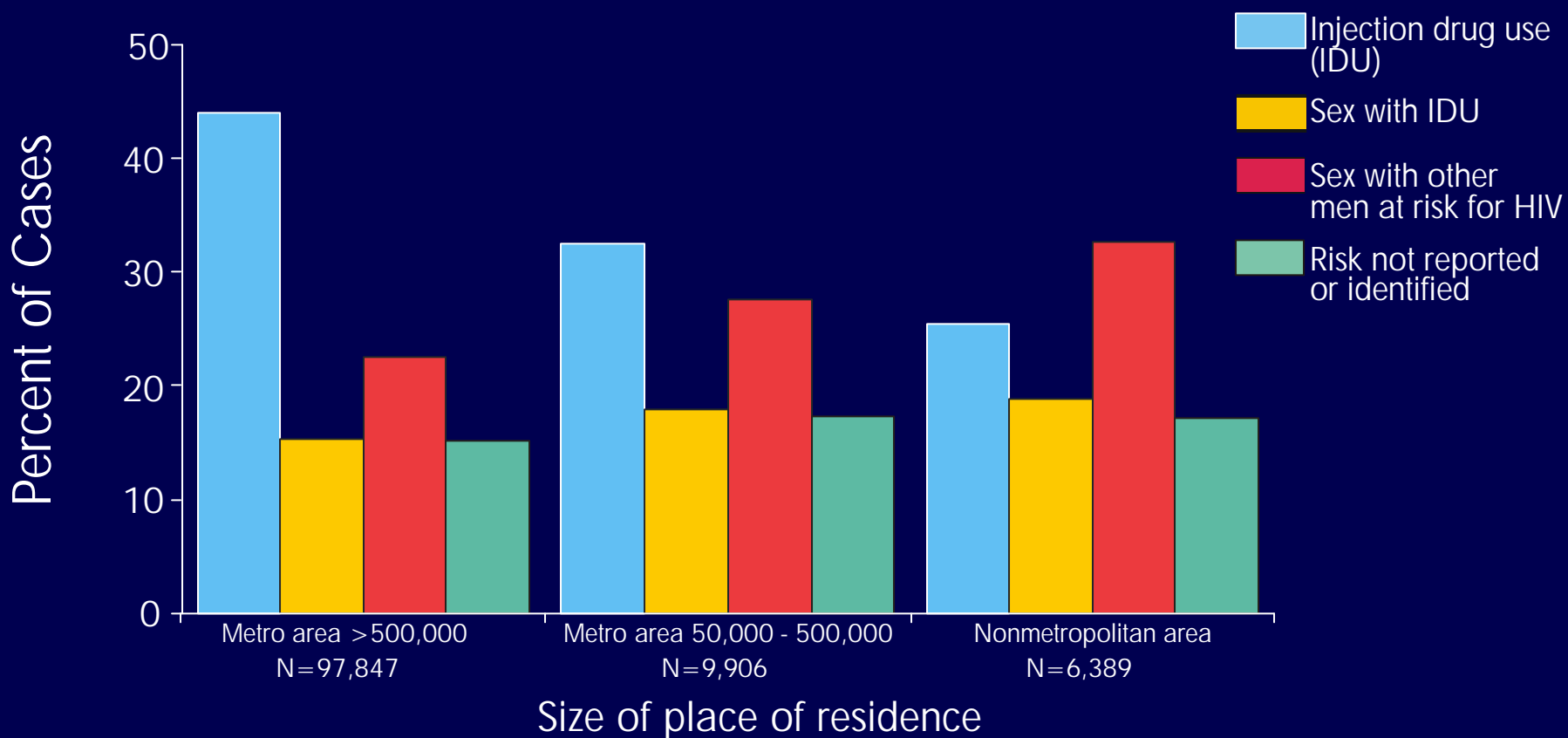
\*Based on reported residence at AIDS diagnosis; cases with unreported or other risk exposures are included in the totals

<sup>#</sup>Data from Puerto Rico, US Virgin Islands and territories are not included in this table

## **Percent Distribution of AIDS Cases in Adult/Adolescent Men, by Size of Place of Residence and Risk Exposure, Reported through 1999, United States**

Within each category of size of place of residence, over half of AIDS cases have been among men who have sex with men. Approximately 20% of the men reported from each geographic category were injection drug users. On the national level, the pattern of risk exposure distribution does not vary by the size of place of residence at diagnosis.

# Percent Distribution of AIDS Cases in Adult/Adolescent Women, by Size of Place of Residence\* and Risk Exposure, Reported through 1999, United States<sup>#</sup>



\*Based on reported residence at AIDS diagnosis; cases with unreported or other risk exposures are included in the totals

<sup>#</sup>Data from Puerto Rico, US Virgin Islands and territories are not included in this table

## **Percent Distribution of AIDS Cases in Adult/Adolescent Women, by Size of Place of Residence and Risk Exposure, Reported through 1999, United States**

The pattern of risk distribution by size of place of residence for women reported with AIDS is the same for large and smaller metropolitan areas. In nonmetropolitan areas, however, the proportion of cases attributed to heterosexual transmission from a man at risk for HIV other than injection drug use is higher than the other risk exposures. AIDS cases reported without a risk exposure are often reclassified into the other categories after follow-up investigations.

# Adult/Adolescent AIDS Cases by Size of Place of Residence\* and Sex, Reported in 1999, United States<sup>#</sup>

## Size of Place of Residence

Sex	Metropolitan area >500,000		Metropolitan area 50,000 - 500,000		Nonmetropolitan area	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
Male	27,902	42	3,549	19	2,554	12
Female	8,623	12	1,045	5	715	3

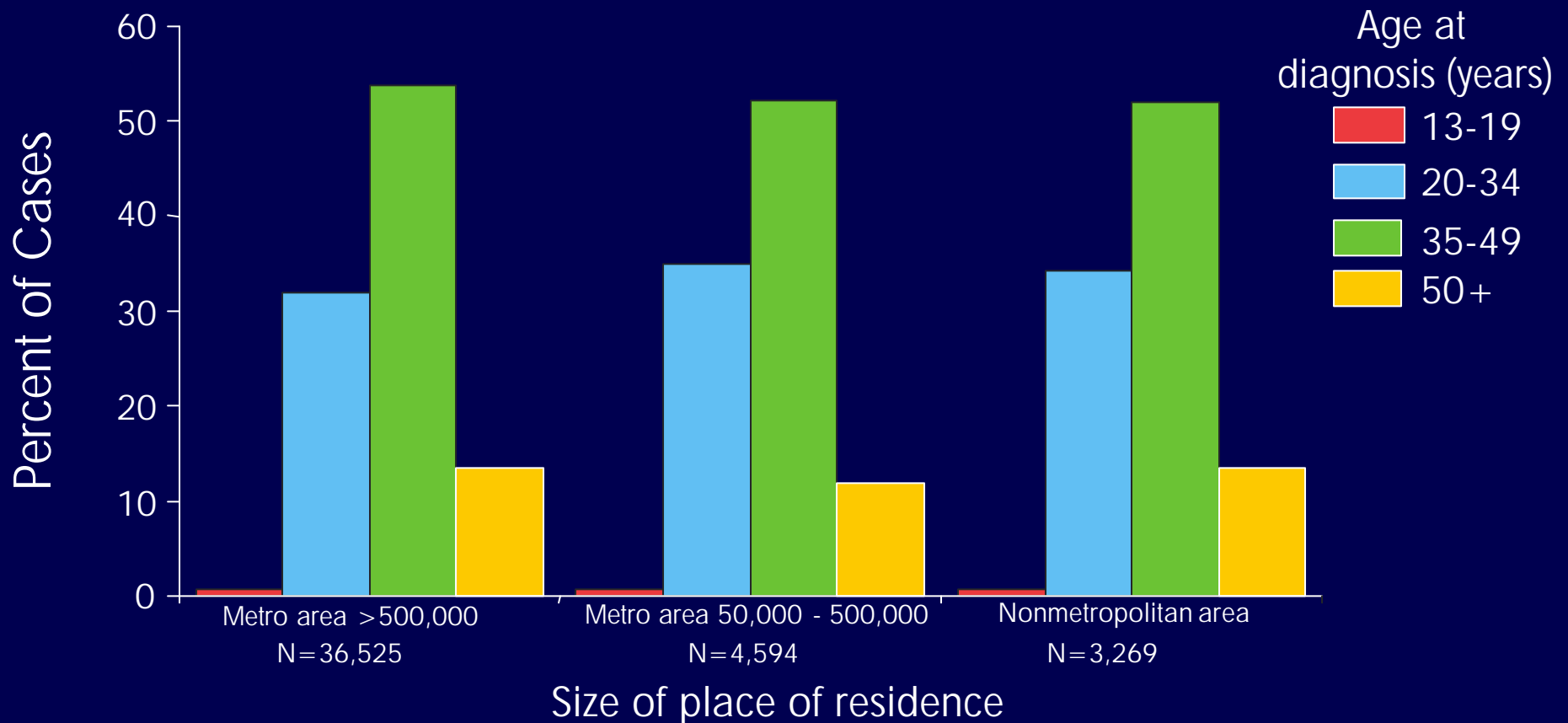
\*Place of residence is based on reported residence at AIDS diagnosis

<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included

## **Adult/Adolescent AIDS Cases by Size of Place of Residence and Sex, Reported in 1999, United States**

The majority of AIDS cases reported are among men, regardless of the size of the place of residence at diagnosis. The rate per 100,000 population for men is 3 to 4 times higher than the rate for women in each of the categories of size of place of residence.

# Adult/Adolescent AIDS Cases by Size of Place of Residence\* and Age at Diagnosis, Reported in 1999, United States<sup>#</sup>



\*Place of residence is based on reported residence at AIDS diagnosis

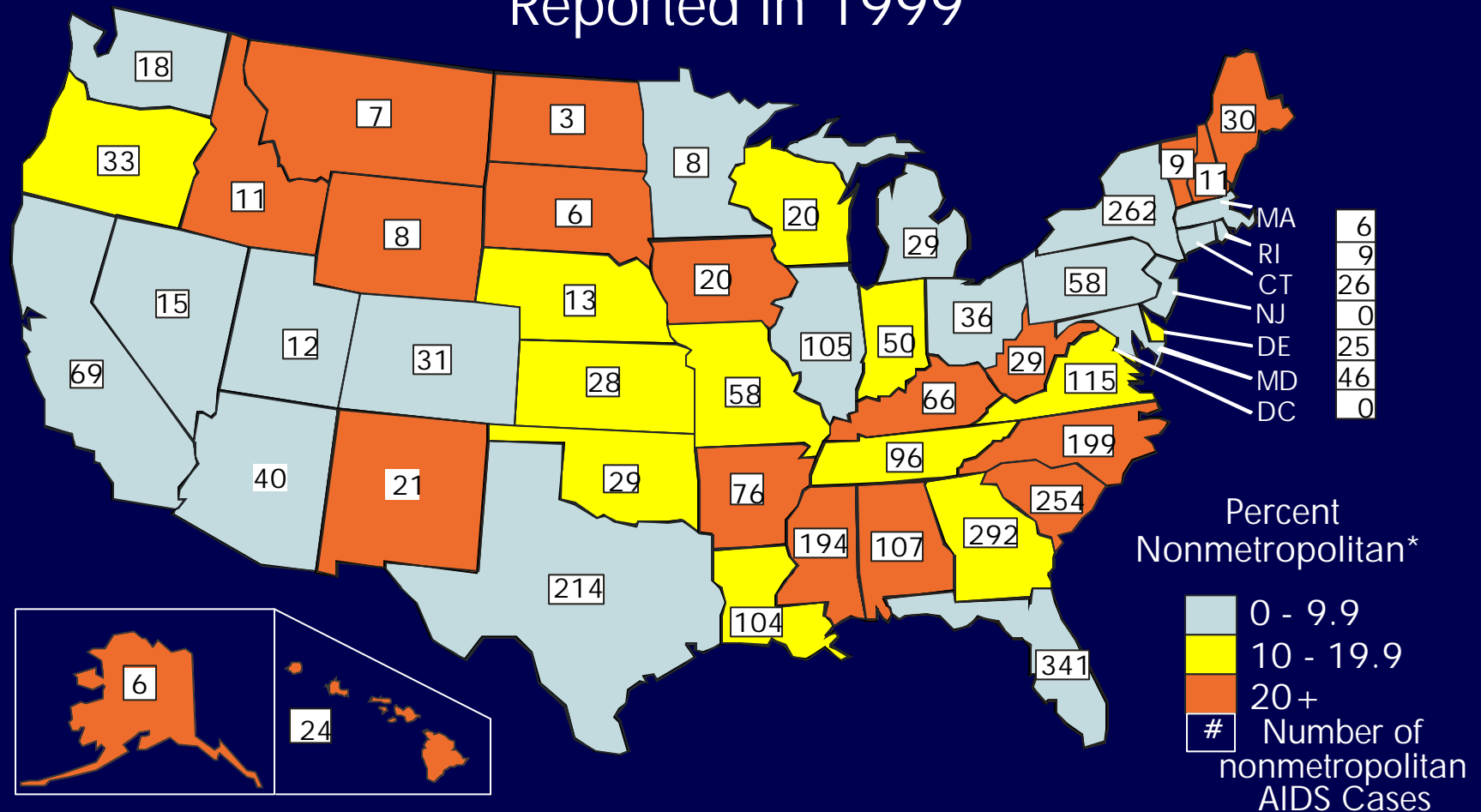
<sup>#</sup>Cases from Puerto Rico, US Virgin Islands and territories are not included

## **Adult/Adolescent AIDS Cases by Size of Place of Residence and Age at Diagnosis, Reported in 1999, United States**

Similar to the distribution of cases by risk exposure and sex, the distribution of cases by age at diagnosis does not vary by size of place of residence. In each category, approximately half of the reported cases are 35-49 years of age at diagnosis and an additional one third are 20-34 years of age. About 10% of cases in each category are over 50 years when diagnosed, and a small proportion are adolescents at AIDS diagnosis.



# Adult/Adolescent AIDS Cases in Nonmetropolitan Areas, Reported in 1999

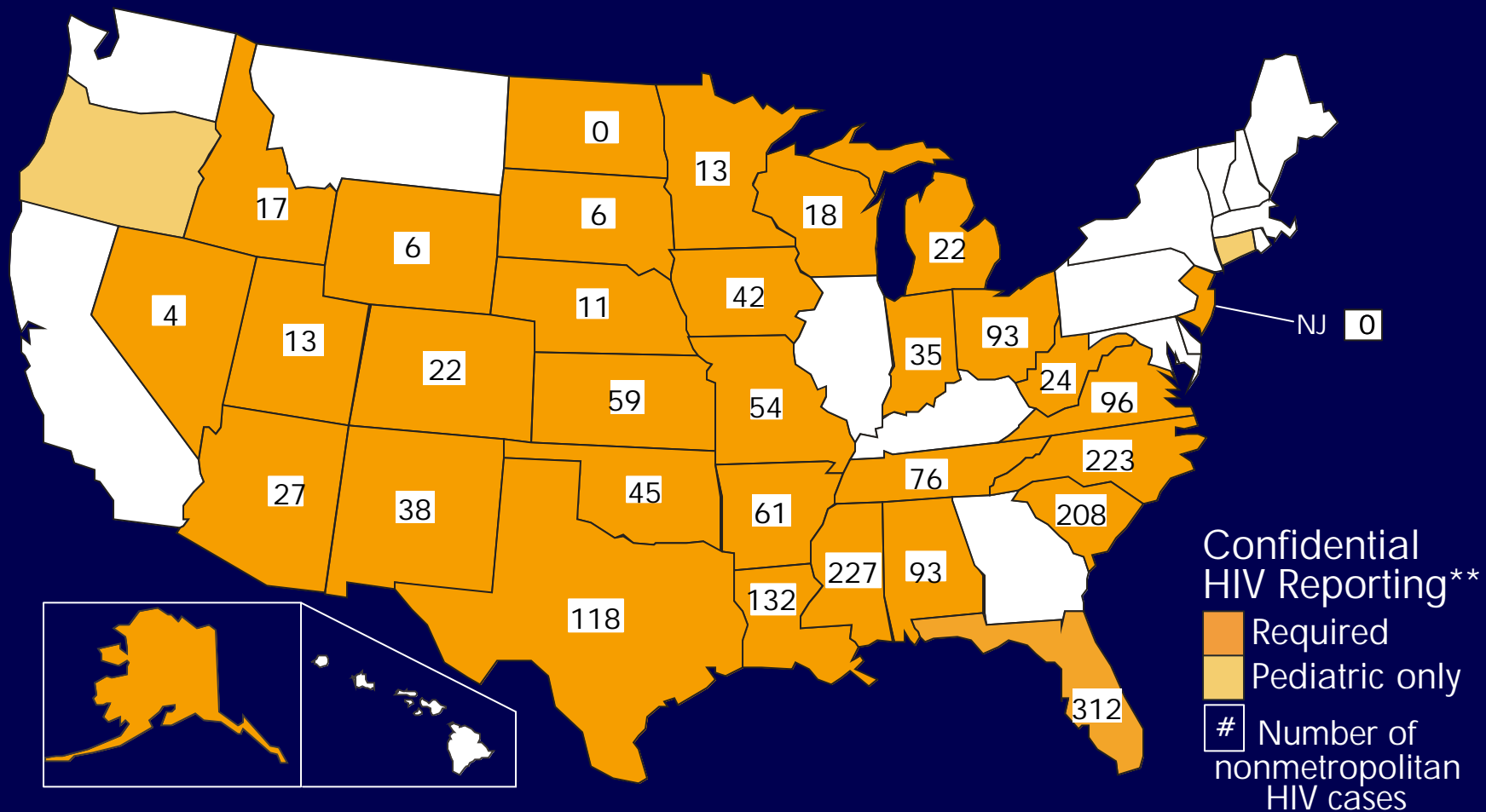


\*Based on reported residence at diagnosis: (Nonmetropolitan cases/total cases) x100

## **Adult /Adolescent AIDS Cases in Nonmetropolitan Areas, Reported in 1999**

The number shown in each state is the number of AIDS cases reported in 1999 from nonmetropolitan areas. The color reflects what percent of the total cases were reported from nonmetropolitan areas. States shown in orange, for example, have at least twenty percent of their cases residing in nonmetropolitan areas. These are primarily states with larger nonmetropolitan populations. States shown in light blue may have a larger number of nonmetropolitan cases, yet they represent a small proportion of the total number of cases reported from that state in 1999. In general these are the states with the larger metropolitan areas in the United States.

# Adult/Adolescent HIV Infection Cases in Nonmetropolitan Areas\*, Reported in 1999



\*In states that conduct name-based confidential HIV infection surveillance among adults/adolescents  
 \*\*HIV cases reported by patient name

## **Adult/Adolescent HIV Infection Cases in Nonmetropolitan Areas, Reported in 1999**

The number of persons reported with HIV infection that reside in nonmetropolitan areas, from those states that conduct name-based confidential HIV case surveillance, are shown on the map. These numbers are underestimates of the number of persons with HIV infection as only persons who have been confidentially tested are reported. Florida, Mississippi, North Carolina and South Carolina reported the largest number of nonmetropolitan HIV cases in 1999. These data are useful as prevention programs and medical and social service plans for these areas are considered.